

## CLAIMS

1           1. A method of securely conducting transactions over a network, comprising the  
2 steps of:

3           A. receiving a telephone call over the telephone network that seeks to initiate a  
4 transaction with a target ;

5           B. obtaining at least a Caller ID defining the telephone from which the call is  
6 being placed;

7           C. authenticating the call by checking at least the Caller ID associated with the  
8 call against Caller IDs in a database of registrants' Caller IDs; and

9           D. proceeding with the transaction only if at least said Caller ID matches that of  
10 an entity that is registered in said database.

1           2. The method of claim 1 in which said transaction comprises a payment with  
2 respect to a financial account.

1           3. The method of claim 2 in which said transaction comprises a payment from a  
2 first financial account into a second financial account.

1           4. The method of claim 1 in which said database contains data uniquely identi-  
2 fying call initiators that are registered to undertake transactions on the system.

1           5. The method of claim 4 in which a transaction is completed only after authenti-  
2 cation of both the call initiator and the call target.

1           6. The method of claim 5 in which said transaction comprises a payment with  
2 respect to a financial account.

1           7. The method of claim 6 in which said transaction comprises a payment from a  
2 first financial account into a second financial account.

1           8. The method of claim 7 in which the steps of debiting and crediting said finan-  
2       cial accounts in connection with completion of the transaction are performed by the call-  
3       receiving entity.

1           9. The method of claim 7 in which said transaction is completed by the target.

1           10. The method of claim 1 which includes the steps of:

2           (1) obtaining from the call initiator a secondary identifier; and

3           (2) using said secondary identifier in connection with authenticating the call ini-  
4       tiator.

1           11. A method of securely conducting transactions over a network, comprising the  
2       steps of:

3           A. receiving, at a second location on a telephone network, a call placed at a first  
4       location on the network and identifying a transaction to be undertaken;

5           B. at a second location on the network, obtaining, from a source other than the  
6       initiator of said call, at least a Caller ID defining the telephone from which the call was  
7       initiated;

8           C. authenticating the call by checking at least the Caller ID associated with the  
9       call against Caller IDs in a database of Caller IDs; and

10          D. proceeding with the transaction only if at least said Caller ID matches that of  
11       an entity that is contained in said database.

1           12. The method of claim 11 in which said second location includes a call facili-  
2       tator entity which performs said authentication.

1           13. The method of claim 12 in which said call facilitator further participates in  
2       said transaction by causing transfer of financial obligations from one account to another.

1           14. The method of claim 13 in which said facilitator completes said transaction  
2       only on authorization from the target of said transaction.

1           15. The method of claim 12 in which said facilitator transmits authentication to a  
2     telephone station at a third location for completion of said transaction.

1           16. The method of claim 11 in which said call is placed by an entity by which a  
2     payment is to be made to another.

1           17. The method of claim 11 in which said call is placed by an entity to which  
2     payment is to be made.

1           18. The method of claim 18 in which said transaction is completed only on ap-  
2     proval by the entity which is to make said payment.

1           19. Apparatus for facilitating transactions over a telephone network, comprising:  
2           A. a data store for storing a database of at least authorized call initiators, said da-  
3     tabase containing, for each entity authorized to engage in said transactions, at least a pri-  
4     mary identifier identifying telephone instruments that are authorized for use in said  
5     transactions and a secondary identifier;

6           B. a stored program data processor for processing transactions directed to it, said  
7     apparatus being connected to store data in said database and to retrieve it therefrom ;

8           C. an interface between said telephone network and said processor for receiving  
9     and transmitting data between said network and said processor;

10          D. said processor programmed to:

11          (1) receive said primary and said secondary identifiers from said telephone net-  
12     work via said interface and to authenticate said identifiers against said database; and

13          (2) further said transaction on authentication.

1           20. Apparatus according to claim 19 in which said processor is programmed to  
2     receive said primary and secondary identifiers from different sources.

1           21. Apparatus according to claim 20 in which said processor is programmed to  
2           authenticate said call only if said primary and secondary identifiers are associated with  
3           each other on said database.

1           22. A method of transferring resources from one entity to another comprising the  
2           steps of:

3           A. accepting from an originator a message identifying a target

4           B. authenticating said message by means of at least a geographically unique tele-  
5           phone identifier;

6           C. transferring a resource from said originator to said target responsive to  
7           authentication of said message.

1           23. The method of claim 22 in which said message identifies said target by means  
2           of a geographically unique telephone number.

1           24. The method of claim 23 in which the telephone numbers of said originator  
2           and said target are distinguishable.

1           25. The method of claim 23 in which said telephone numbers are not distinguish-  
2           able and in which said originator and said target are distinguished by distinguishable  
3           passwords.

1           26. The method of claim 22 in which said originator is further authenticated by  
2           means of a password.

1           27. The method of claim 22 in which said message is transmitted by telephone by  
2           said originator.

1           28. The method of claim 27 in which said message is accepted by an entity that  
2           maintains a database of authorized originators, said database including at least a geo-  
3           graphically unique telephone identifier for said originator.

1           29. The method of claim 22 in which said telephone number is a universal tele-  
2 phone identifier.

1           30. The method of claim 28 in which said entity effectuates said transfer by  
2 means of entries in accounts maintained by said entity.

1           31. The method of claim 28 in which said entity effectuates said transfer by  
2 means of transmitting authorization to at least one account maintained by at least one  
3 other entity.

1           32. The method of claim 28 in which said entity effectuates said transfer by  
2 means of transmitting authorizations to accounts maintained by at least one other entity  
3 for said originator and said target, respectively.

1           33. The method of claim 31 in which said authorization authorizes debiting an  
2 account of said originator that is maintained by said other entity.

1           34. The method of claim 31 in which said authorization authorizes debiting an  
2 account of said target that is maintained by said other entity.

1           35. A method of selling resources, comprising the steps of  
2           A. accepting from an originator a message identifying a resource to be purchased;  
3           B. authenticating said message by means of at least a geographically unique tele-  
4 phone identifier;  
5           C. authorizing the transfer of a resource to said originator responsive to authenti-  
6 cation of said message.

1           36. A method of selling resources according to claim 35 in which said message  
2 identifies said resource by means of a resource number.





1           54. The method of claim 53 in which said verification is performed by checking  
2           the given telephone number against information obtained from the telephone company.

1           55. The method of claim 22 in which said resource is transferred in response to  
2           receipt of the telephone number of said target.

1           56. A method of securely conducting transactions over a network, comprising the  
2           steps of:

3           A. receiving a telephone call over the telephone network that seeks to initiate a  
4           transaction with the called party;

5           B. obtaining from the caller an identifier unique to either the caller or the in-  
6           tended recipient;

7           C. communicating said identifier to an entity that is enabled to authenticate the  
8           identifier by checking said identifier against at least the Caller ID associated with the  
9           identifier in a database accessible to said entity; and

10          D. proceeding with the transaction only if at least said Caller ID matches that of  
11          an entity that is registered in said database.

1           57. The method of claim 56 in which said identifier is one that has been assigned  
2           by said entity to a device on which said call is being made.

1           .....58. The method of claim 56 in which said identifier is associated with the  
2           calling party.